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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,818	03/22/2006	Guillaume Bichot	PU030279	3745
24498	7590	04/28/2009		
Thomson Licensing LLC P.O. Box 5312 Two Independence Way PRINCETON, NJ 08543-5312			EXAMINER BEYEN, ZEWDU A	
			ART UNIT 2419	PAPER NUMBER
			MAIL DATE 04/28/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/572,818

**Applicant(s)**

BICHOT ET AL.

**Examiner**

ZEWDU BEYEN

**Art Unit**

2419

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5, 25 and 26 is/are allowed.
- 6) ☒ Claim(s) 6-24, 27-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## **DETAILED ACTION**

### **Response to Amendment**

- This action is responsive to amendment dated 03/10/2009
- Applicant's amendments filed on 03/10/2009 has been entered and considered.
- Claims 1, 2, 13, 18 and 19, are amended.
- Claims 1-34 are pending.
- The objection to the Specification is hereby withdrawn in view of Applicants' amendment to the specification.
- The rejection to the 35 USC § 112 rejections is hereby withdrawn in view of Applicants' amended claims.
- Claims 6-24, 27-28 and 29-34 stand rejected.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6-24, and 27-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6, 18, and 27 recites the phrase "establishing a unicast session ..."  
,"identifying multicast data packets associated with said multicast group" , and

"monitoring transmissions of said multicast data packets". In claim 6 "said multicast group" lack antecedences basis. In addition, in claim 6, 18, and 27 it is not clear how multicast data packets will be monitored while the only session that is established being a unicast session. It seems there is an omitted step.

Claims 13 and 18 are ambiguous. According to the preamble, the claims are directed to "a multicast-to-unicast converter". However, the body of the claims contains limitations concerning elements outside of the converter, such as the user terminal.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 29-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Khan  
to (20020143951),

**Regarding claims 29 and 32, Khan teaches means for establishing a unicast session with said multicast-to-unicast converter** (Khan, [0030] discloses unicast client join a multicast group by sending a special "unicast join" control message 505 to a source server)  
**means for encapsulating said multicast data packets in a unicast frame**(Khan, abstract The agents repackage the multicast information into a unicast data packet)

**means for identifying multicast data packets associated with a multicast group**(inherently it has to identify the multicast data packets)  
**and means for forwarding said unicast frames via said unicast session**(Khan, abstract discloses the agents repackage the multicast information into a unicast data packet and forward the unicast data packet to a client registered with the agent)  
**Regarding claim 30, Khan teaches testing to determine if said established unicast session is still active;** (Khan, [0033], discloses a unicast client may leave a multicast group by failing to respond to a multicast group query either initiated by a router or initiated by an agent. The agent poll or query its attached clients (i.e., the unicast clients for whom the agent has been designated to provide multicast service))  
**performing one of continuing to receive multicast data packets via said already established unicast session** (Khan, [0030] discloses unicast client join a multicast group by sending a special "unicast join" control message 505 to a source server. In addition, the abstract discloses the agents repackage the multicast information into a unicast data packet and forward the unicast data packet to a client registered with the agent)  
**and selecting another dedicated terminal by said intermediate device with which said intermediate device establishes a new unicast session** (Khan, [0033] discloses If an attached unicast client does not respond to the agent's query message, the agent may stop forwarding multicast packets to the client( then continue to forward for unicast clients that are responsive) . The agent also poll or send a query to its

attached unicast clients to determine which multicast groups the agent needs to belong to and to whom the agent needs to forward information from those multicast groups)

**Regarding claim 31, Khan teaches transmission of multicast data packets occurs in one of a local area network** (Khan, [0004], and fig.2 disclose LAN, however it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the combination by replacing the LAN by WLAN to improve transmission efficiency)

**Regarding claim 33, Khan teaches means for testing to determine if a wake-up message is received** (Khan, [0033], discloses a unicast client may leave a multicast group by failing to respond to a multicast group query either initiated by a router or initiated by an agent. The agent poll or query its attached clients (i.e., the unicast clients for whom the agent has been designated to provide multicast service))

**performing one of continuing to receive multicast data packets via said already established unicast session** (Khan, [0030] discloses unicast client join a multicast group by sending a special "unicast join" control message 505 to a source server. In addition, the abstract discloses the agents repackage the multicast information into a unicast data packet and forward the unicast data packet to a client registered with the agent)

**and selecting another dedicated terminal by said intermediate device with which said intermediate device establishes a new unicast session** (Khan, [0033]

discloses If an attached unicast client does not respond to the agent's query message, the agent may stop forwarding multicast packets to the client( then continue to forward for unicast clients that are responsive) . The agent also poll or send a query to its attached unicast clients to determine which multicast groups the agent needs to belong to and to whom the agent needs to forward information from those multicast groups)

**Regarding claim 34, Khan teaches a plurality of unicast sessions are established in order to support multiple transmission rates** (Khan, fig.4 discloses plurality of unicast sessions)

### ***Response to Argument***

1. Applicant's arguments with respect to claims 29 and 32 have been fully considered but are not persuasive.

#### **Applicant Argument:**

- Claim 29 has been rejected as unpatentable over Kahn et al in view of Sinnarajah et al. As discussed above, if Kahn et al were to be used with Sinnarajah et al, the agent would notify the client on one channel, and send a multicast message to the client on another channel. Nowhere would the combination show or suggest:

- "means for establishing a unicast session and means for encapsulating said multicast data packets in a unicast frame", as specifically set forth in Claim 29. It is therefore clear that Claim 29 is not affected by the cited references.
- Claim 32 has been rejected as unpatentable over Kahn et al in view of Sinnarajah et al. As discussed above, if Kahn et al were to be used with Sinnarajah et al, the agent would notify the client on one channel, and send a multicast message to the client on another channel. Nowhere would the combination show or suggest:
- "means for establishing a unicast session with said multicast-to-unicast converter;  
means for identifying multicast data packets associated with a multicast group;  
means for encapsulating said multicast data packets in a unicast frame; and  
means for forwarding said unicast frames via said unicast session", as specifically recited in Claim 32. It is therefore clear that the patentability of Claim 32 is not affected by the cited references.

**Examiner Response:**

- Applicant's arguments regarding claims 29 and 32 are irrelevant, due to the new ground of rejection.



***Allowable Subject Matter***

Claims 1-5, and 25-26 are allowed.

***Conclusion***

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ZEWDU BEYEN whose telephone number is (571)270-7157. The examiner can normally be reached on Monday thru Friday, 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 1-571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 2419

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Z. B./

Examiner, Art Unit 2419

/Hassan Kizou/

Supervisory Patent Examiner, Art Unit 2419